F. R. ALLCHIN

A SOUTH INDIAN COPPER SWORD AND ITS SIGNIFICANCE

I first met Jean-Marie Casal in October 1951, when I made a memorable journey in that queen of archaeological prospecting vehicles, the old Lafly of the Délégation Archéologique Française en Afghanistan, from Kandahar to Mundigak. My diary tells me little about my stay, except to recall to mind that "the food was outstanding". My field notebook gives only a laconic description of the site and the main periods revealed by the excavation, as they were described to me by Casal, and brief notes on the still useful surface collection which I then made, a collection which included a winsome little terracotta sheep described by Madame Casal as "un petit mignon!". Casal had recently completed his excavations in South India, and had already published the first of his two volumes on the *Fouilles d'Arikamedou-Virampatnam* (1949). I was expecting to visit South India for the first time shortly after, and it was therefore natural that we should have discussed current archaeological problems of that area also. I remember little of the detail, but one thing stands out very clearly in my mind. Casal expressed his private expectation that in course of time a Copper-Bronze Age civilization would be discovered in South India, comparable in many ways with that of the north. I remember that I, probably not without arrogance, argued against this idea. What I think I was not aware of at the time, and what I realized only later when I saw the second volume on *Site urbain et Sites funéraires* (1956), was that Casal had already excavated two grave sites near Pondichery, at Gaurimedou and at Mangalam, where there were clear indications of burials appreciably earlier than the great majority of Megalithic graves, and that he had already concluded (rightly I believe) that these graves belonged to the Chalcolithic period. In the years since that conversation I have often recalled it, and it is therefore pleasant to add a small but potentially exciting new piece of evidence to the subject.

Among the Indian collections in the Museum of Archaeology and Ethnology in Cambridge there is a copper sword, remarkable for its bifurcated hilt, which inevitably calls to mind the "antennae" of the swords and dirks of the Gangetic copper hoards, and for the fact that until recently it was entirely undocumented. There was

nothing except the fact that it was housed with other Indian collections even to associate it with India, and in the absence of any firm evidence of its source or provenance I had long declined to discuss it. Recently, however, its history and provenance have been rediscovered, and they make it very desirable that it should be published.

The sword was discovered in 1925 on the Moongalaar Tea Estate, near Vandiperiyar, high up in the Cardamom hills in the then Travancore State. The discovery was made by Mr A. Mactavish, the manager of the estate, during well sinking operations. In course of time it was brought to this country and placed on loan in the Cambridge Museum. Why no record was then made of the source of the loan remains unexplained. The estate is about eight miles north of Vandiperiyar and bordered on the south-west by the Periyar river. The find was made about two furlongs from the new estate bungalow, at about 3,000 feet above sea level. According to the finder it was at a depth of 7-8 feet below the surface. Mr Mactavish does not remember whether any other associated finds were made, and probably even if there were fragments of pottery they would have passed unnoticed. The accompanying map has been prepared with the help of Mr Mactavish, for whose enthusiastic co-operation I wish to tender my sincere thanks.

In February 1976 we paid a short visit to Vandiperiyar and found the Moongalaar Estate without difficulty. It belongs now to the Malayalam Tea Estates. We should like to acknowledge our gratitude to Mr Walter Sharpe, the Superintendent of the neighbouring Wallardie Estate, and to Mr Brian Biddlecombe of Moongalaar itself for their kind assistance. The map in fig. 1 has been corrected as a result of our visit. We were able to meet an elderly retired estate worker, still living on the estate and now almost blind, who remembered the discovery with remarkable clarity. He described the find spot with reference to certain trees, and we were able to identify it without difficulty. He also remembered that other objects were found, including a large earthenware pot, holding about six gallons, and three spikes (*śūla*) of iron. Some "wire" of unspecified metal was discovered at the same time. Other pottery had been found during the digging of the pump house a short distance away.

The actual find spot is in a ravine, about midway between the new bungalow and the factory. No pottery or other remains could be found at the place, but a visit to the find spot of the large pot, some 400 m. lower down the ravine, revealed one or two sherds of coarse red ware. At a third spot, slightly higher up the slope of the ravine, road clearance had recently encountered sherds of pottery, several of which we were able to discover. They were of a coarse gritty clay, burned to a pale red colour and

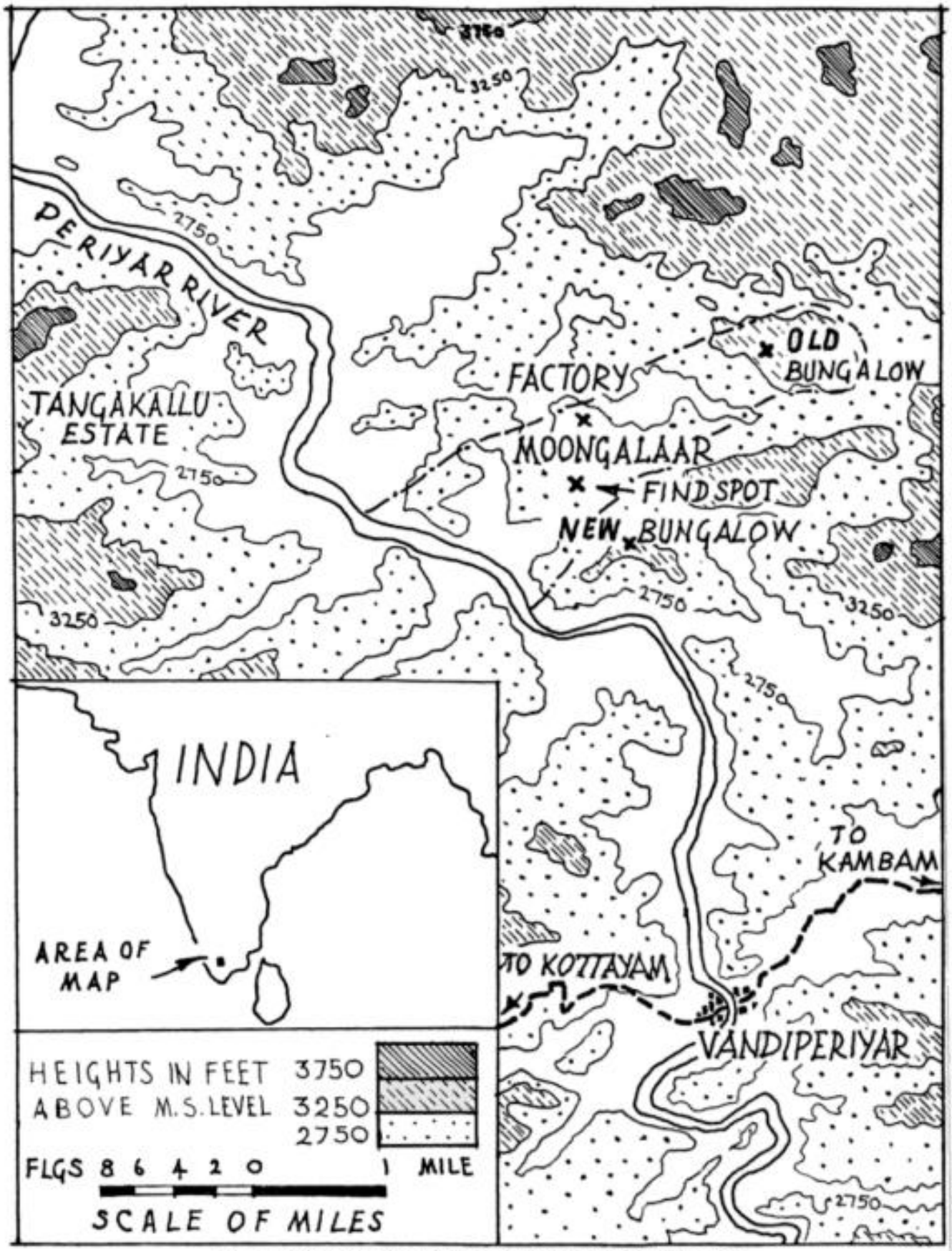

Fig. 1. Map: Vandiperiyar and the findspot of the sword.

included the thick rim of an ill-formed vessel. Several smaller fragments had traces of red burnished slip. There were also small fragments of evidently ancient bone.

There are several standing stones in the fields, one near the old bungalow is about 2 m. in height, another slightly smaller one is situated in field no. 14 just to the north of the ravine.

All in all we may conclude with fair confidence that these scattered finds indicate the former existence of graves in the area, with pottery resembling that discovered in the graves of the Palni hills. The ravine is not more than four miles from Tangakallu (Tengakkal) Estate, on the west of the river. Here too ancient graves have been reported, although their age has not been established. The whole region is today very thinly populated, mainly by labour imported for the tea and cardamom estates, and it has still to be established who the people can have been who deposited the sword or made the graves. According to the 1'' survey map, there is a temple of Aiyappan near the forest rest house on the right bank of the river some ten miles north of the Moongalaar Estate. An annual fair is held there. This shrine is not to be confused with the famous pilgrim centre of the cult of Aiyappan at Sabarimalai. Although this, too, is high in the hills, it is as the crow flies little more than 30 miles south-west of Vandiperiyar. There is yet another temple of Aiyappan near Peermade.

The Periyar river rises in the heights of the Western Ghats to the south, and flows northwards into the great Periyar Lake, which is artificial, and made by damming the river at an altitude of about 2,800 feet. Thence it flows through wild forested country, generally in a north-westerly direction, crossing the road from Kottayam to Kambam at the little village of Vandiperiyar, about ten miles below the lake, and emerging on to the plains some 70 miles beyond, where it turns westwards towards the sea. The hilly tract is throughout only sparsely populated, the population until modern times consisting largely of tribal people, Kādar, Muduvan and Pulaiyan. These people are it seems to us most unlikely to have been in any way directly descended from the makers of the graves or of the sword.

The sword is 70 cms. in length, made apparently by hammering from a single rod of forged copper (fig. 2). The metal has been analysed by Dr J. A. Charles of the Department of Metallurgy, Cambridge University, who reports that it is an arsenical copper of fairly high purity. The presence of a relatively high proportion of arsenic (3.2%) need not, in the view of Dr Charles, indicate a conscious addition of this element as an alloy, but may rather indicate the selection of an ore which already contained the substance.

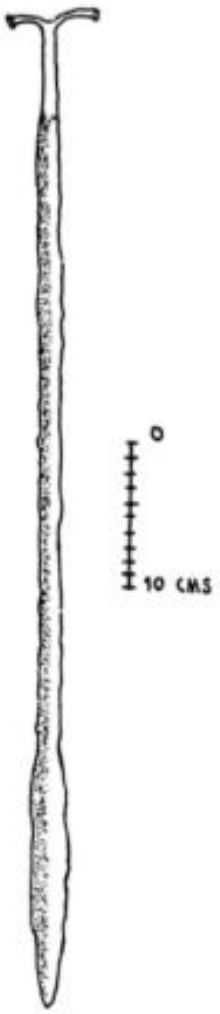

Fig. 2. Copper sword from Vandiperiyar.

The analysis shows the following elements:

%	*Tin*	*Lead*	*Zinc*	*Iron*	*Nickel*	*Arsenic*	*Copper*
	<0.2	Ca 0.05	<0.01	<0.01	0.05	3.2	96.48

The two "antennae" are each about 3 cms. long, of roughly circular section, and terminate in a rounded knob (fig. 3). The hilt is of a flat rectangular section, being approximately 1 cm. in width and .35 cms. in thickness. The blade has a section which near the hilt is of a flattened lozenge form, and is about 1.7 cms. in width for

the greater part of its length. Towards the point the section is lenticular, and the blade widens to a maximum of 3 cms. The overall width of the two antennae is 7.2 cms., giving a ratio to the length of the sword of 9.72.

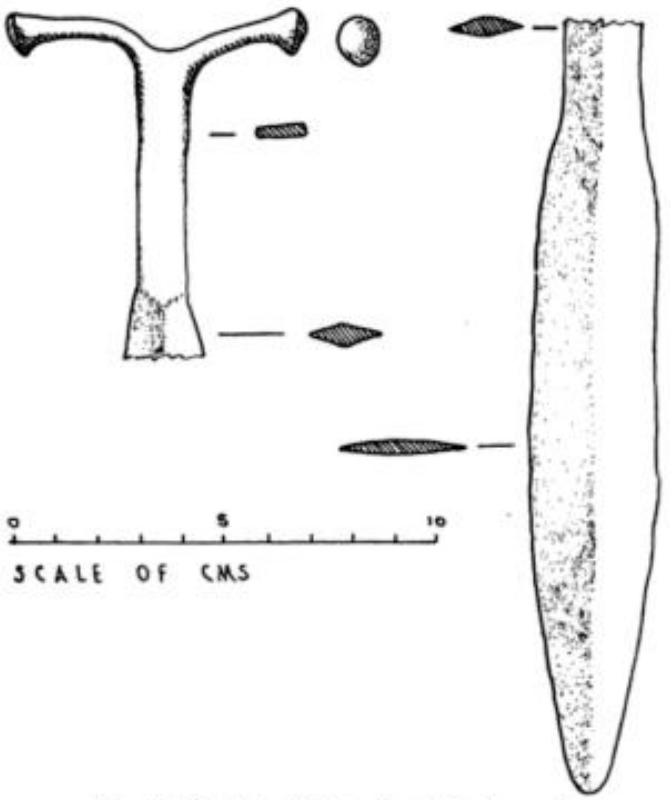

Fig. 3. Details of hilt and point of sword.

We now wish to consider the Vandiperiyar copper sword in a wider context. It belongs to a series of copper swords and dirks which have been found widely distributed in the Indian subcontinent. The distinguishing feature of this series is the presence of a divided or bifurcated hilt, giving in its extreme form the appearance of two antennae. Such hilts are of course not unique to India: during the Bronze Age related forms are found widely distributed from Western Europe to Iran. In these areas they are generally thought of as components of bronze rather than copper weapons, but in the Indian context they appear to be more commonly of copper. The Indian distribution is soon told. First, there is an uncertain number of finds

from the hoards of the Ganges-Jamunā Doāb, from four or five sites, and in all numbering some fifteen to twenty specimens.[1] The largest group comes from Faṭehgaṛh where there are several varieties of hilt in evidence: the most common has a short cast division of the hilt, rather incipient than true antennae; a much less common, indeed perhaps unique, type has longer antennae, and this specimen has for some reason been most commonly cited; and a third type has a single short extension on one side of the hilt only.[2] This, too, seems to be rare, if not unique. All the specimens of this group appear to have been cast. Analyses of the metal are regretably few and unclear, but it seems that the majority are of copper, rather than of true bronze. The length of three specimens of the first type of hilt, illustrated by Smith, ranges from 68-78 cms.; the length of the single specimen of the second type is only 44 cms.; and of the third type is 76 cms. We agree with Heine-Geldern that there is a reminiscence of copper or bronze dirks of the Koban culture about the first type; but there are, as Lal has pointed out, also significant differences, not least in the clumsy size and weight of the Indian examples.[3] While the broad generic similarities, if they are accepted, might be used to indicate general contemporaneity, they would be unlikely to signify much else.

A second group consists of four copper or bronze dirks reportedly found in a hoard in the Mehsana district of north Gujarāt and now in the National Museum in New Delhi. As far as I am aware these pieces are still unpublished, and I have to rely upon memory and hurried sketches of two made in my notebook some years ago. Both are short dirks rather than swords, and do not compare in length with the other examples we are considering. One appears to have been cast with short stubby antennae. The other may also have been cast, but the antennae are more carefully

[1] In the present state of knowledge it is difficult to be precise. There is no exhaustive corpus of the actual specimens, scattered through the museums of India and other countries, nor have many of the copper tools ever been subjected to metallurgical analysis. B. B. LAL in 1951 listed 1 sword from Biṭhur, 13 from Faṭehgaṛh and 1 from Hardoi; P. L. GUPTA, in a hitherto unpublished typescript listed only 4 from Faṭehgaṛh, 2 from Hardoi, and unspecified examples from Chandausī and Shāhjahānpur.

[2] SMITH, V. A., The Copper Age and Prehistoric Bronze Implements of India, *Indian Antiquary,* Vol. 34, 1905, pp. 229-241, illustrates three specimens of the first type, as against only one of the second and third. The second specimen, with abnormally long antennae, has been repeatedly chosen for illustration, often as representing the whole class (cf. GORDON, D. H., *The Prehistoric Background of Indian Culture,* Bombay, 1958, p. 136; WHEELER, Sir R. E. M., *Early India and Pakistan,* London, 1959, p. 119; LAL, B. B., Further Copper Hoards from the Gangetic Basin, *Ancient India,* Vol. 7, 1951, p. 35; ALLCHIN, B. and ALLCHIN, R., *The Birth of Indian Civilization,* Harmondsworth, 1968, p. 203; AGRAWAL, D. P., *The Copper Bronze Age in India,* New Delhi, 1971, p. 197).

[3] HEINE-GELDERN, R., The Coming of the Aryans and the End of the Harappa Civilization, *Man,* No. 151, 1956, pp. 136-140; and LAL, *op. cit.,* 1951, p. 35.

formed and terminate in small flattened fan-shapes. Both have blades of more or less oval section, that of the former being considerably thicker than the latter. Apparently the metal has been analysed and found to contain 8-9% tin. They should therefore be classed as bronze.[4] A third find is of a small dirk or spear-head from the excavations at Chandoli, in the Deccan.[5] This little piece is also unlike any of the others, being only 17.1 cms. long. It was apparently made by casting with a solid hilt which was then split and hammered to form the two short antennae. A sample of metal from this piece was analysed by Dr Hegde and found to be of copper with small amounts of lead, iron, zinc, arsenic, and nickel. The specimen is therefore of copper. The find probably dates from the 14th century B.C., and would be a near contemporary of an almost identical piece from a grave in Palestine, as we have remarked elsewhere.[6]

A fourth group of finds comes from a hoard discovered in the neighbourhood of Kallur in Raichur district. It consisted of three copper or bronze swords, and is reported to have been found in a cleft in the rock by villagers.[7] Some doubt attaches to the exact place, and another report suggests that the swords were discovered elsewhere in the same neighbourhood. Munn, incidentally noticed some time prior to the discovery that a hilltop rock-shelter some twenty miles distant was "traditionally the find spot of some old swords". The foot of the hill adjoining the reputed find spot at Kallur was excavated by the Hyderabad Archaeological Department and traces of a copper furnace and fragments of copper implements were recorded. I visited the site in 1952 and was left in no doubt of the plentiful evidence of Neolithic-Chalcolithic occupation throughout the area adjoining the find spot. To suggest, as does Dr D. P. Agrawal that because later occupation debris was also recovered near by, the swords may be of much later date seems entirely unwarranted.[8] The Kallur swords are all apparently of cast copper, and show important features to differentiate them from the other groups. The longest is 97.8 cms. in overall length, and the antennae are 6.98 cms. wide; the second is 76.8 cms. long and the antennae are 8.25 cms. wide; and the shortest of the three is 67.95 cms. long and the antennae are 6.35 cms. wide. In each case the maximum width of the blade is somewhat less than

[4] I understand that this group of dirks is shortly to be published by Drs S. P. Gupta and O. P. Agrawal of the National Museum, New Delhi.

[5] Deo, S. B. and Ansari, Z. D., *Chalcolithic Chandoli*, Poona, 1965, p. 116; and Hegde, K. T. M., in Deo and Ansari, *op. cit.*, 1965, Appendix 2, pp. 185-186.

[6] Allchin and Allchin, *op. cit.*, 1968, p. 153.

[7] *Annual Report Hyderabad Archaeological Department*, 1938-39, p. 23.

[8] Agrawal, *op. cit.*, 1971, p. 199.

that of the antennae. This gives a ratio of overall length to width of antennae of 15.4, 9.3 and 10.7 respectively. Therefore is respect of both length and ratios these swords are nearer to the Vandiperiyar sword than either are to the Gangetic examples. The Kallur swords, too, are geographically closest to the Vandiperiyar sword, but even so are not less than 450 miles removed.

None of the finds listed, with the exception of that from Chandoli comes from a well-dated horizon, but recently other associative evidence has been produced for the dates of the copper hoards. Thermoluminescent dates from sites which yielded the OCP pottery, found associated with copper hoards in several instances in the Doāb, have indicated a scatter of dates between 2650 and 1170 B.C.[9] There are not as yet any indications of the position of copper hoards relative to this spread, nor of the relative occurrence of individual copper types. However, in the Sarasvatī Valley Dr Suraj Bhan has found a copper harpoon of the characteristic type of the copper hoards, from excavations at Mitathal. Although not from a well-stratified context, it may probably be assigned to period II B, which he dates, sequentially, to between 1700 and 1500 B.C.[10] There is no way of dating the Kallur swords, but, for what it is worth, we suggested that they should be associated with the final phase of the Chalcolithic culture of the Karṇāṭaka region, and with the time when "Jorwe" influences were reaching there from the north. This we suggested dated from 1400-1500 B.C.[11] Thus for the whole group we may expect a broadly 2nd millennium dating; and for the southern examples, including the Vandiperiyar sword, dates in the final centuries of that millennium, or at the latest (and depending upon the still uncertain date of the earliest use of iron in the extreme south) the opening centuries of the 1st.

The specimens we have cited above represent a wide range of sizes, forms, techniques of manufacture and, where information is available, metals. But they nevertheless seem to us to form a broad distributional group. As far as we can gather the majority are of copper without the addition of alloys, apart from small amounts of arsenic or nickel which were probably already present in the native ores. There is uncertainty about the Mehsana dirks, and this will remain until they are properly published. So too are we not aware of the metal of the Kallur swords, and these certainly require adequate study. The common feature of the divided hilt, being

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[9] LAL, B. B., A Note on the Excavations at Saipai, *Purātattva*, Vol. 5, 1971-72, pp. 46-49.

[10] SURAJ BHAN in *Purātattva*, Vol. 5, 1971-72, pp. 16-21 and fig. 19; and also *Excavation at Mitathal (1968) and other Explorations in the Sutlej-Yamuna Divide*, Kurukshetra, 1975, pp. 65-66.

[11] ALLCHIN and ALLCHIN, *op. cit.*, 1968, p. 165.

doubtless a device to aid hafting as a spear-head in the case of the Chandoli piece, and for securing the hand grip of a sword or dirk in the other instances, is formed in a variety of different ways. We know of no copper swords or daggers from indubitable Iron Age or Early Historic contexts in any part of South Asia, and this strengthens our conviction that all the present examples date from before the beginning of the use of iron, at the very least from before its appearance as a common metal. A more difficult question is to evaluate what weight, if any, may be placed on Heine-Geldern's theory of the Iranian relationship, or of the identity of form of the Chandoli spear-head with a contemporary piece from Palestine. Certain pieces, such as the Fort Munro dagger, with its cast fan-shaped hilt and its small size (44.5 cms.), show an unquestionable affinity to specimens from Luristan, Iran, and for this reason we have left them out of the series. One of the Mehsana daggers, both in size, form and probably metal also shows closer affinity to Iranian prototypes. But all the rest appear to be at best distantly related, if at all. It is probably as foolish to try and brush aside such correspondences as there are, as it is to make too much of them. India and Iran were open to contacts of all sorts during the 3rd and 2nd millennia, and it would be perfectly possible to point either to trade or movements of peoples to account for similarities. Therefore at the least these resemblances might indicate very indirect contacts, while at the most they might supply some support for the historical fact of the spread into India of the Indo-Aryan languages which took place during this period. But one thing is, I think, beyond question, that whatever indications they may bear of external influences, the whole series is almost certainly of local "Indian" manufacture, and has all the hallmarks of belonging to a single broad tradition of technology. This conclusion, if it is accepted, is important because it provides the framework against which external influences must be measured.

The find spot of the Vandiperiyar sword in a remote, unpeopled forest region, high in the Cardamom hills, is highly suggestive. The presence of ancient graves in the immediate vicinity is even more so. One is almost forced to the conclusion that the sword and the graves must be in some way culturally related. The Tangakallu (Tengakkal) graves were, as far as we are able to ascertain, stone cists containing large pottery urns, two urns having heights of 2' 10" and 2' 6".[12] The larger urn had a "ring chain around it with parallel symmetrical ends", probably an appliqué band with finger tip impressions, a not uncommon form of decoration on urns of the late Chalcolithic and early Iron Age. In both periods urns so decorated were used for

[12] PODUVAL, V., *Travancore Archaeological Administrative Report*, M.E. 1112, pp. 8-10, quoted by KRISHNA IYER, L. A., *Kerala Past and Present*, Vol. 1, *Prehistoric Archaeology*, Trivandrum, 1948, pp. 14-15.

burial purposes.[13] No metal objects were discovered, and the excavator concluded that the graves belonged to the "Neolithic" period.[14] The belief that some of the graves in the extreme south were anterior to the arrival of iron was not restricted to Vasudeva Poduval or L. A. Krishna Iyer. The Jesuit fathers who excavated many graves in the Palni hills, which form the north-eastern extension of the Cardamom hills and are not much more than 50 miles distant, also recorded some groups of graves in which no iron objects were discovered, but in which there were copper pins and bangles, some with distinctive open ends, crossing and expanding into trumpet shapes.[15] These copper bangles sound remarkably similar to the copper bangle discovered at Gaurimedou by Casal.[16] Plain copper bangles are by no means unknown as accompaniments of iron objects in the Megalithic graves, but we are aware of only one specimen of this type from such a context, from Perumbair.[17] The argument *ex silentio* for a pre-iron date for the Tangakallu graves is by itself not very convincing; that for the more numerous graves in the groups from the Palni hills is more so. But nonetheless to suggest that they are "Neolithic" seems quite unwarranted. Aiyappan reported two graves in the Perumal hills from one of which no metal was discovered, but in which there was pottery of an unusual character.[18] The Perumal hills are a part of the Palni hills. We have recently discussed this pottery and commented upon the similarity of some of the rare forms to pots from the Gandhāra grave complex and from sites in Iran, including the Cemetery B at Sialk.[19] The majority of the vessels from the Perumal grave are in plain red ware: black-and-red ware is present in much smaller quantities. Similarly a majority of the forms demand comparison not with the forms commonly found in the Megalithic graves,

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[13] See for example ALLCHIN, F. R., *Piklihal Excavations,* Hyderabad, 1960, p. 43, Type 37b; NAGARAJA RAO, M. S., *Protohistoric Cultures of the Tungabhadra Valley,* Dharwar, 1971, p. 47, fig. 14.1; REA, A., *Catalogue of prehistoric Antiquities from Adichanallur and Perumbair,* Madras, 1915, pp. 39-40 and pl. 9, etc., etc.

[14] KRISHNA IYER, *op. cit.,* 1948, p. 15.

[15] ANGLADE, L., Dolmens and tombs of the Pulney Hills, *Journal of the Anthropological Society of Bombay,* Vol. 8, 1954, pp. 56-59.

[16] CASAL, J.-M., *Site urbain et sites funéraires des environs de Pondichéry,* Paris, 1956, pp. 92-94.

[17] LESHNIK, L. S., *South Indian Megalithic Burials,* Wiesbaden, 1974, p. 271, fig. 7, No. 9. The examples with which this copper or bronze bangle is compared by Dr Leshnik come from Taxila, Sirkap. However, as the Taxila bangles are of hollow gold, with abutting expanded ends rather than crossed, the comparison has little relevance.

[18] AIYAPPAN, A., Rude stone Monuments of the Perumal Hills, *Quarterly Journal of the Mythic Society of Bangalore,* Vol. 31, 1941, pp. 373-379.

[19] ALLCHIN, F. R., Pottery from Graves in the Perumal Hills, in GHOSH, A. K. ed., *Perspectives in Palaeoanthropology,* Calcutta, 1974, pp. 299-308.

but with those of the final stage of the Neolithic-Chalcolithic phase of adjacent regions. These things encouraged us to look for a date anterior to that of the great majority of Megalithic graves, and we proposed 1000-800 B.C., for the Perumal hill assemblage. The pottery from the graves of the Palni hills evidently shared many of the same features. The small jugs, with the high up-turned channel spouts, and the bowls on perforated stands are both in evidence, and this gives us added reason to expect that some at least are of an equally early period. We do not wish to involve ourselves here in a discussion of the dating of the two Sialk cemeteries, a recent revision would place them some four centuries later than had been earlier suggested; putting the earlier, A, around 1000-800 B.C., and the later, B, in a period from 800-550 B.C. Until more objective dating is available this must suffice, but we would like to recall that in the earlier cemetery copper and bronze are the principal, indeed almost the only metals, and iron is correspondingly rare; while in the later cemetery iron is a fairly frequent occurrence, alongside copper and bronze.[20] It is tempting to see in this situation an analogy for these South Indian graves, assigning them to a transitional period when iron was still a scarce commodity, or virtually unknown, and when copper remained the principal metal in use. What this may mean in terms of absolute chronology has still to be determined. The important thing for our present purpose is that the relative earliness of the graves makes it inherently probable that the Tangakallu graves and the Vandiperiyar sword belong to a single period and culture.

This conclusion raises all sorts of interesting possibilities. Who were the makers of the sword and of the graves? What is the origin of those exotic pottery forms from the Perumal grave? The answer to both questions may lie far to the north. We are reminded of the thought-provoking account of the discomforts experienced by the "Aryan" immigrants into India envisaged by Nirad Chaudhuri.[21] If there were mobile, nomadic groups of horsemen whose extension through the Indian peninsula was linked with the spread of iron working, and whose original homeland had been far away in the mountains of northern Iran, the Caucasus or Central Asia, then the steamy heat of the jungles as they moved southwards must have given them cause to

[20] YOUNG, R. CUYLER, The Iranian migration into the Zagros, *Journal of Persian Studies,* Vol. 5, 1967, pp. 22-27. It must be recalled that Ghirshman originally dated Sialk Cemetery A from 1400-1200 B.C., and later revised his view, bringing the dates down to 1200-1000, and those for Cemetery B to 1000-800. Schaeffer, after a long discussion, restored substantially the earlier dating, concluding that A should date from 1400-1200, and B from 1250-1100; SCHAEFFER, C. F. A., *Stratigraphie comparée,* Oxford, 1948, pp. 467-477.

[21] CHAUDHURI, N., *The Continent of Circe,* Bombay, 1965, Ch. 7.

remember with nostalgia their former homes, and to look to the highlands they encountered for a return to a more congenial climatic regime. Such highlands would have incidentally provided good grazing for their herds. It remains to be investigated whether such migrants might not have brought the first Indo-Aryan speech and culture to reach these southern regions. We have long been interested in the origin of the cult of the horseman God seen among so many of the Indian tribal peoples, and in the cults of Aiyanār and Aiyappan in the south. Was this "Aryan" lord originally a deity of such migrants? We would like to investigate the shrine near Vandiperiyar and also the archaeological potentials of the more famous shrine at Sabarimalai, because, we believe, there may be here an interesting possibility of throwing light upon the earliest stages of the "Aryanization" of the southern parts of the peninsula.

Postscript

At the Fourth Conference of South Asian Archaeologists held at Naples in July 1977, V. I. Sarianidi showed an illustration of a copper or bronze sword, acquired in Kabul but almost certainly emanating from the Dashli region of north-west Afghanistan. This piece has a form which is almost identical to that of one of the common types found in the Doāb copper hoards. It is 50 cms. long, with maximum blade width of 4 cms., and width of antennae of c. 3.25 cms. Both the length and ratio of length to width of antennae are well within the range of the Indian specimens. The discovery of this piece must in our view increase the probability that the Indian series as a whole show evidence of some sort of contact with northern Iran or the Bactrian region. I am grateful to Dr Sarianidi for permitting me to refer to this important find.